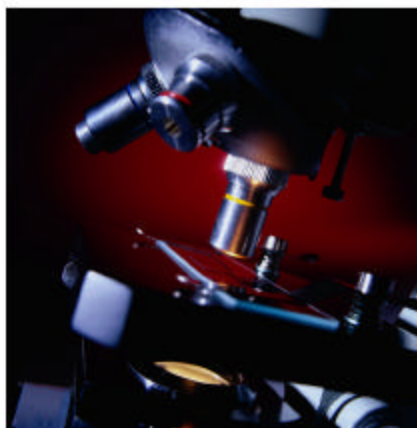
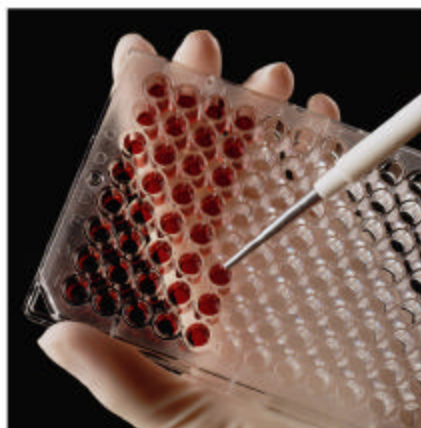




TG 214

DLS Customer Service Manual

(USACHPPM-MAIN)



The Directorate of Laboratory Sciences, USACHPPM-Main is the proponent of this manual. Users are invited to send comments and suggested improvements on a DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Commander U.S. Army Center for Health Promotion and Preventive Medicine, ATTN: MCHB-DC-LLI, 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403.




This updated version supersedes USACHPPM TG 214, January 1997.

ABOUT THE DIRECTORATE OF LABORATORY SCIENCES (DLS) AT USACHPPM-MAIN

● **SERVICE HOURS FOR DLS.** Routine service hours are from 0800 to 1630 hours Eastern Standard Time, Monday through Friday, except for Federal holidays.



● **COMMUNICATION WITH DLS.** Communication and interaction with DLS should begin in the earliest stages of project planning and continue throughout the entire life of the project. Available means of communication with DLS include--

WAYS TO COMMUNICATE WITH DLS	
	Telephone: DSN 584-2208 Commercial 410-436-2208
	"Sampnews" Bulletin Board is available via e-mail: .. CHPPM Microsoft Outlook Users: In Outlook, click on "New," in the "To" block type USACHPPM-Sampnews, type in your message, attach CHPPM Form 330-R-E for sample submission, and click "Send." .. All Customers: Type an e-mail message, attach CHPPM Form 330-R-E for sample submission, and send to chppm-sampnews@apg.amedd.army.mil
	Fax: DSN 584-4108 Commercial 410-436-4108
	For Routine Correspondence/Samples: Commander, USACHPPM ATTN: MCHB-TS-LID (Sample Management Laboratory) 5158 Blackhawk Road Aberdeen Proving Ground, MD 21010-5403
 FedEx®  UPS®	For Sample Shipments: Commander, USACHPPM ATTN: MCHB-TS-LID (Sample Management Laboratory) Building E2100 Aberdeen Proving Ground, MD 21010-5403

® **FedEx** is a registered trademark of Federal Express Corp, Memphis, TN 38132.

® **UPS** is a registered trademark of United Parcel Services of America, Inc., Atlanta, GA 30346.

- **DLS VISION STATEMENT.**

DLS VISION

To be a world class provider of comprehensive laboratory sciences services in support of the Army Health Promotion and Preventive Medicine Program.

- **QUALITY ASSURANCE.**

DLS QUALITY POLICY

Laboratory work will be performed within a quality system designed to--

- ◆ Consistently meet or exceed customer needs.
- ◆ Encourage continuous improvement through proactive leadership and involvement.

Our goal is to provide quality analytical results in a timely manner at a reasonable price.

TABLE OF CONTENTS

	PAGE
CHAPTER 1: INTRODUCTION	
1-1. PURPOSE	1-1
1-2. REFERENCES	1-1
1-3. DLS FORMS	1-1
1-4. ABBREVIATIONS AND TERMS	1-1
1-5. COMMUNICATION WITH DLS	1-2
CHAPTER 2 : QUALITY ASSURANCE	
2-1. ACCREDITATION	2-1
2-2. QUALITY PLANNING.....	2-2
2-3. DATA QUALITY OBJECTIVES	2-2
CHAPTER 3: DLS ANALYTICAL SERVICES	
3-1. AREAS SUPPORTED BY DLS	3-1
3-2. ANALYTICAL SERVICES	3-2
3-3. SERVICES PROVIDED.....	3-2
3-4. ANALYSES PERFORMED.....	3-4
3-5. EXPANDED ANALYTICAL SERVICES	3-5
CHAPTER 4: COMMUNICATING AND INTERACTING WITH DLS	
4-1. EFFECTIVE COMMUNICATIONS.....	4-1
4-2. CUSTOMER SUPPORT SERVICES OFFERED BY DLS	4-2
CHAPTER 5: SELECTING THE BEST TEST METHOD	
5-1. BEST TEST METHOD SELECTION ASSISTANCE	5-1
5-2. TEST METHOD SELECTION CONSIDERATIONS.....	5-1
5-3. SELECTING THE ACODE.....	5-2
5-4. SAMPLE ANALYSIS PRIORITY DESIGNATIONS	5-3
5-5. SAMPLE SAFETY CONSIDERATIONS	5-3
5-6. ADDITIONAL SAMPLE OR PROJECT CONSIDERATIONS	5-4
CHAPTER 6: SUBMITTING REQUESTS FOR LABORATORY SERVICES	
6-1. PURPOSE OF A REQUEST FOR LABORATORY SERVICES	6-1
6-2. COMPLETING A REQUEST FOR LABORATORY SERVICES	6-1
6-3. SUBMITTING A COMPLETED CHPPM FORM 330-R-E.....	6-9
6-4. RECEIPT CONFIRMATION.....	6-9
6-5. MODIFYING REQUESTS FOR LABORATORY SERVICES	6-10

PAGE

CHAPTER 7: SUBMITTING SAMPLES TO DLS

7-1.	SAMPLE COORDINATION REQUIREMENTS FOR OCONUS CUSTOMERS	7-1
7-2.	SAMPLE COORDINATION REQUIREMENTS FOR CONUS CUSTOMERS	7-2
7-3.	ENVIRONMENTAL SAMPLE COLLECTION KITS	7-3
7-4.	OCCUPATIONAL HEALTH SAMPLE COLLECTION REQUIREMENTS	7-3
7-5.	RADIOBIOASSAY SAMPLE COLLECTION REQUIREMENTS	7-3
7-6.	SAMPLE REJECTION	7-4
7-7.	REQUIRED SHIPMENT FORMS	7-4
7-8.	SAMPLE FIELD IDENTIFICATION, PRESERVATION, AND LABELING	7-5
7-9.	SAMPLE PACKING INSTRUCTIONS	7-6
7-10.	SHIPMENT REQUIREMENTS AND SPECIFICS	7-8
7-11.	PROJECT PLANNING/SAMPLE SUBMISSION CHECKLIST	7-9
7-12.	CHAIN OF CUSTODY	7-10

CHAPTER 8: SUBMITTING A DLS CUSTOMER COMMENT/COMPLAINT FORM

8-1.	OVERVIEW	8-1
8-2.	ACCESSING AND TRANSMITTING THE DLS CUSTOMER COMMENT/COMPLAINT FORM	8-1

APPENDIX A: REFERENCES A-1**APPENDIX B: USACHPPM FORMS**

CHPPM Form 8-R-E, INDUSTRIAL HYGIENE BULK SAMPLE DATA	B-1
CHPPM Form 9-R-E, INDUSTRIAL HYGIENE AIR SAMPLE DATA	B-5
CHPPM Form 75-2-E, LISTING OF SPECIFIC CHEMICAL ANALYSES	B-9
CHPPM Form 235-R-E, CHAIN-OF-CUSTODY RECORD	B-10
CHPPM Form 330-R-E, REQUEST FOR LABORATORY SERVICES	B-12
CHPPM Form 332-R, CUSTOMER COMMENT/COMPLAINT FORM	B-15

GLOSSARY

SECTION I – ABBREVIATIONS	Glossary-1
SECTION II – TERMS	Glossary-2

PAGE**TABLES**

1-1.	DLS CUSTOMER SUPPORT SERVICES	1-3
5-1	GUIDELINES FOR DLS SAMPLE ANALYSIS PRIORITIES	5-3
5-2	SHORT-HOLDING TIME ANALYSES (48 hours or less).....	5-5
7-1.	REQUIRED DLS SHIPMENT FORMS.....	7-4
7-2.	REFRIGERANT REQUIREMENTS	7-7
7-3.	SHIPMENT REQUIREMENTS AND SPECIFICS	7-8
7-4.	FREQUENTLY ASKED QUESTIONS IN CHAIN OF CUSTODY	7-10

FIGURES

2-1.	DQO PROCESS STEPS	2-3
6-1.	REQUEST FOR LABORATORY SERVICES (CHPPM FORM 330-R-E) (SAMPLE)	6-2
6-2	INSTRUCTIONS FOR COMPLETING A REQUEST FOR LABORATORY SERVICES (CHPPM FORM 330-R-E)	6-5
6-3.	“SAMPNEWS” REVISION MESSAGE TO AN ORIGINAL CHPPM FORM 330-R-E (SAMPLE).....	6-11
7-1	FIELD SAMPLE CONTAINER LABEL (SAMPLE)	7-6
7-2	PROJECT PLANNING/SAMPLE SUBMISSION CHECKLIST (SAMPLE)	7-9

CHAPTER 1

INTRODUCTION

INTRODUCTION

1-1. PURPOSE.

The Directorate of Laboratory Sciences (DLS) at USACHPPM-Main is committed to excellent customer service. Every effort is made to give the customer what is needed, when it is needed. This Customer Service Manual reflects this commitment by giving DLS customers information and guidance on how to--

- Communicate with DLS.
- Select the Best Test Method and Analytical Test Code (Acode).
- Complete a U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) Form 330-R-E (Request for Laboratory Services Form).
- Submit samples to DLS.
- Use a CHPPM Form 332-R (DLS Customer Comment/Complaint Form).

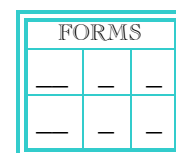
1-2. REFERENCES.

Appendix A contains references that provide information about other areas of interest to DLS customers, such as regulatory requirements and sample collection techniques. These references include, but are not limited to, other USACHPPM technical guides (TGs) and pertinent regulatory documents.



1-3. DLS FORMS.

Appendix B provides copies of USACHPPM forms referenced in this manual. Reproducing these forms is permitted and encouraged.



1-4. ABBREVIATIONS AND TERMS.

The glossary explains the abbreviations and terms used in this manual.

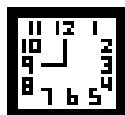
Use of trademarked names does not imply endorsement of the U.S. Army but is intended only to assist in identification of a specific product.

1-5. COMMUNICATION WITH DLS.

Communication and interaction with DLS should begin in the earliest stages of project planning and continue throughout the entire life of the project.

a. **Means of Communication.** Communication with customers offers DLS the ability to respond to the customers' needs. The chart shown in "ABOUT THE DIRECTORATE OF LABORATORY SCIENCES (DLS)," located in the front of this manual, describes the available means of communication with DLS. Chapter 3 provides additional information on communicating and interacting with DLS.

b. **DLS Service Hours.**



(1) Technical Information and Routine Sample Receipt. Routine service hours are from 0800 to 1630 hours Eastern Standard Time, Monday through Friday, except for Federal holidays.



(2) Sample Receipt Outside of Normal Service Hours. Special arrangements must be made prior to the shipment of any samples that will arrive outside of DLS routine service hours. These arrangements are necessary to ensure appropriate DLS personnel will be available to receive, process, and preserve the samples.

c. **"Sampnews": The E-Mail Bulletin Board.**

(1) "Sampnews" is an electronic mail (e-mail) bulletin board. This bulletin board was established to offer DLS customers a convenient, effective, and efficient way to exchange information with DLS using e-mail. In DLS the site is monitored on a regular basis by the laboratory project coordinator (LPC), consultants, team leaders, and other parties, as appropriate, and can be accessed simultaneously by the DLS staff.

(2) Advantages of using the bulletin board include:

- Eliminates the time spent on the telephone trying to track down the appropriate person.

- More than one person can access your message simultaneously, thereby speeding up responses.



- Not restricted to worldwide time zones.

- Messages can be sent 24 hours a day.

● Questions about the status of samples and laboratory reports can be answered quickly.



● Convenient route for submitting requests for laboratory services, CHPPM Form 330-R-E. See Chapter 6 for more information about this form.

FORM		
—	—	—
—	—	—

(3) To be an effective communication tool, messages sent to “Sampnews” need to be easy to understand, complete, and with a header that clearly summarizes the content. See Chapter 6, Figure 6-2, for a sample message.

CHPPM
Form 330-R-E

HOW TO SEND A MESSAGE TO “SAMPNEWS”



◆ **CHPPM Microsoft Outlook Users:**



In Outlook, click on “New,” in the “To” block type USACHPPM-Sampnews, type in your message, attach CHPPM Form 330-R-E for sample submission, and click “Send.”

◆ **All Customers:**

Type an e-mail message, attach CHPPM Form 330-R-E for sample submission, and send to chppm-sampnews@apg.amedd.army.mil

d. **Customer Support Service.** Table 1-1 describes the customer’s potential needs and the available DLS customer support services.

TABLE 1-1. DLS CUSTOMER SUPPORT SERVICES

CUSTOMER'S NEED	TECHNICAL CONSULTANT	SAMPNEWS BULLETIN BOARD 
Selection of the proper Acode	X	
Choice of the most appropriate SAMPLE ANALYSIS PRIORITY	X	
Interpretation of regulatory procedures and documents	X	
Technical information on analyses	X	
Review of laboratory data and reports	X	
Coordination of priority, complex, or special projects	X	
Submission of PROJECT MODIFICATIONS to a processed CHPPM Form 330-R-E		X
Cost quotes for sampling projects 		X
Guidance pertaining to requirements for sample collection, shipping, or submission		X
Details about Sample Collection Kits		X
Details concerning sample processing and status reports		X

CHAPTER 2
QUALITY ASSURANCE

QUALITY ASSURANCE

2-1. ACCREDITATION.

a. The DLS maintains accreditation by third party organizations to both National and International Standards. The scope of testing for these accreditations covers environmental, occupational health, and clinical samples.

- International Accreditations - The DLS Quality System has been registered to International Organization of Standardization (ISO) 9001 since 1997.
- National Accreditations - Environmental
 - ◆ American Association for Laboratory Accreditation (A2LA) which presently incorporates the ISO 17025
 - ◆ U.S. Environment Protection Agency (USEPA) Environmental Lead Laboratory Accreditation Program (ELLAP)
 - ◆ National Institute of Standards and Technology (NIST) National Volunteer Laboratory Accreditation Program (NVLAP)
- National Accreditations - Occupational Health
 - ◆ American Industrial Hygiene Association (AIHA)
- National Accreditations - Clinical
 - ◆ Department of Defense (DOD) Clinical Laboratory Improvement Program (CLIP)
 - ◆ Commission on Office Laboratory Accreditation (COLA)

b. DLS also maintains certification for drinking water, wastewater, and/or solid waste analyses in 44 states.

c. The quality system meets all the requirements of ISO 9001 and ISO 17025, which cover testing laboratories. Internal quality control (QC) procedures are performed daily to ensure continuing quality of the analytical product. DLS is a regular participant in the following Proficiency Analytical Testing (PAT) Programs:

- California Hazardous Waste Performance Evaluation (PE) Studies
- Environmental Lead PAT Program
- Environmental Resource Associates (ERA) Soil PE Program
- ERA Interlaboratory Comparison Study for Radiochemistry
- ERA Water Pollution PE Studies
- ERA Water Supply PE Studies
- AIHA PAT Program
- NVLAP for Bulk Asbestos

2-2. QUALITY PLANNING.

a. Quality planning for analytical work is designed to deliver acceptable quality data that meets the customer needs at a reasonable cost. Proper planning requires that DLS personnel involved in the work are fully informed as to the purpose and objectives of the projects they support. This understanding is vastly improved if the DLS staff is involved in establishing Data Quality Objectives (DQOs) prior to beginning the data collection operations. Once the data are collected, they are evaluated to ensure that the original project DQOs have been met.

b. The information in the following paragraph describes procedures for project planning and for assessing the quality of the data collected.

2-3. DATA QUALITY OBJECTIVES.

a. The DQO process is a series of planning steps based on the scientific method that is designed to ensure that the type, quality, and quantity of environmental data used in decision-making are appropriate for intended application. The steps of the DQO process are shown in Figure 2-1.

b. The DQO process allows decision makers to define their data requirements and acceptable levels of decision errors during planning before any data are collected. The DQOs are qualitative and quantitative statements derived from outputs of each step of the DQO process that optimize the design for obtaining data by--

- Clarifying the study objective.
 - Defining the most appropriate type of data to collect.
 - Determining the most appropriate conditions from which to collect the data.
 - Delineating the decision rules and acceptable errors.
- c. The basic indicators of data quality are accuracy, precision, completeness, representativeness, comparability, and detection limits. Acceptance limits for each of these specific indicators must be defined and often tailored to specific measurement method attributes.

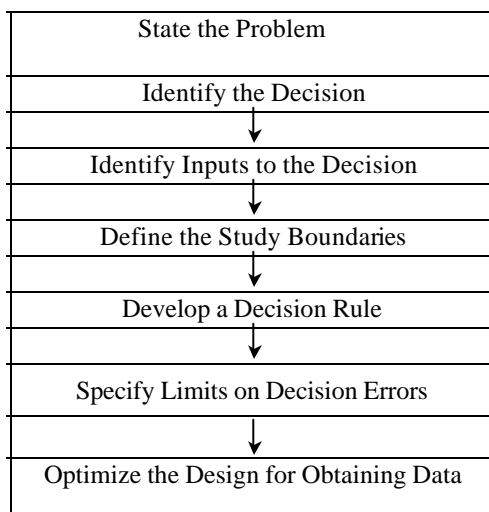


Figure 2-1. DQO Process Steps

USAEPA Guidance for the Data Quality Objective Process, EPA QA/G-4, August 2000.

DLS's goal is to establish procedures that meet the DQOs required or requested by DLS customers.

CHAPTER 3
DLS ANALYTICAL SERVICES

DLS ANALYTICAL SERVICES

3-1. AREAS SUPPORTED BY DLS.

- a. DLS support is provided primarily to Army environmental and occupational health programs engaged in health risk assessment. Many of these programs are internal to USACHPPM, but support is also extended directly to installations throughout the continental United States (CONUS) and outside the continental United States (OCONUS). Other DOD and Federal agencies are supported on a space-available or reimbursable basis.
- b. DLS offers the customer a number of distinct advantages over other laboratories, including convenience and flexibility.

WHY USE DLS?

- ◆ One-stop shopping for laboratory analysis.
- ◆ Accessible.
- ◆ Hassle free--no need to write and manage contracts.
- ◆ In-depth experience with the military unique products and activities.
- ◆ Flexible--able to react quickly to non-standard needs.
- ◆ Emphasis on quality--one of the most highly accredited laboratories in the country.
- ◆ Field support and mobile laboratory available.
- ◆ Archiving of Analytical Data

3-2. ANALYTICAL SERVICES.

Staffed with over 80 experienced professionals familiar with the military's special needs, DLS is uniquely able to respond to emergencies and support projects with unusual requirements. In a typical year, DLS chemists analyze nearly 50,000 samples and perform over 80,000 analytical procedures using methodology from--

- U.S. Environmental Protection Agency (USEPA).
- American Standards for Testing Materials (ASTM).
- National Institute of Occupational Safety and Health (NIOSH).
- Association of Official Analytical Chemists (AOAC).
- The "Standard Methods for the Examination of Water and Wastewater" publications.
- Internally developed custom methods.



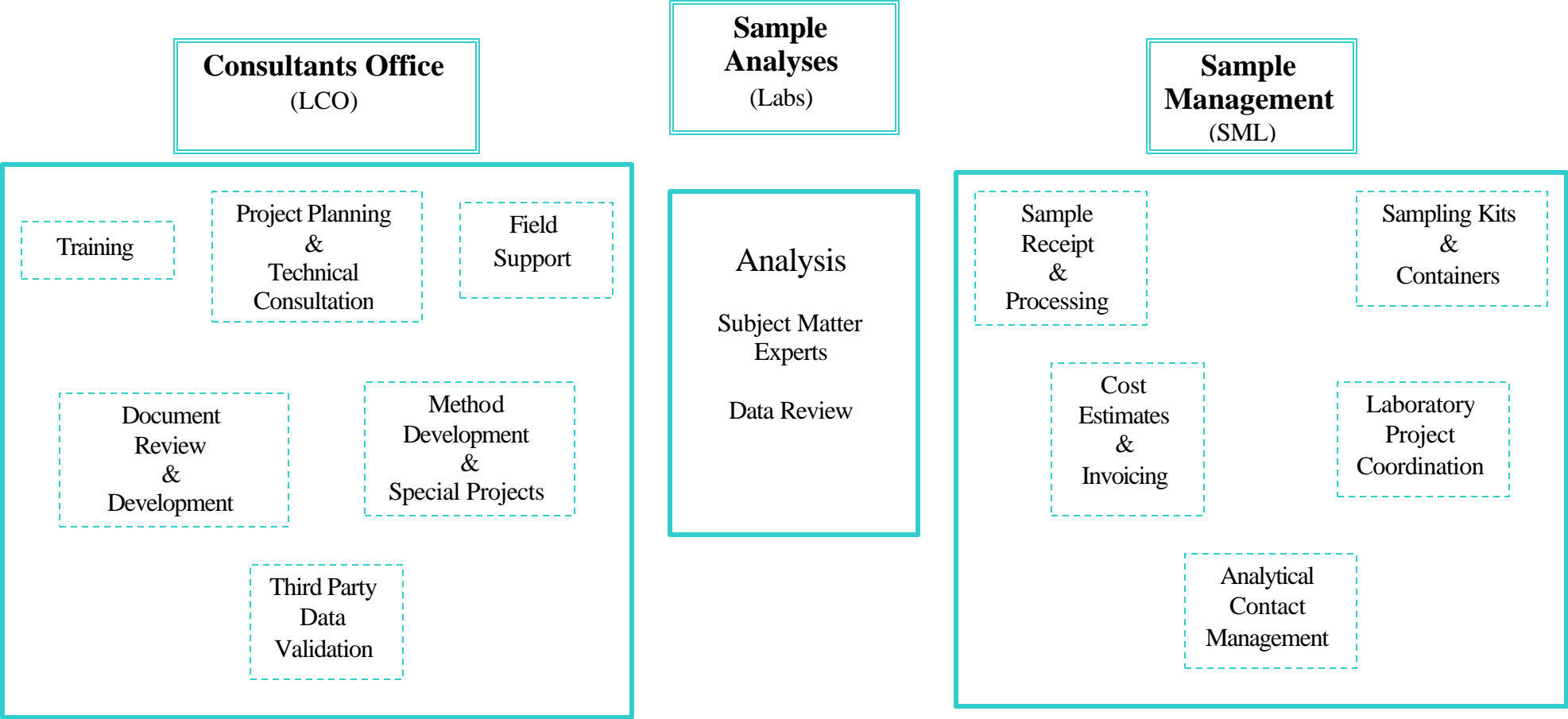
CUSTOM METHODS

- ◆ When the need arises, DLS chemists develop custom methods to meet a client's specific requirements.
- ◆ Data generated by DLS analysts plays a critical role in health risk assessments and determining safe working environments.

3-3. SERVICES PROVIDED.

For a summary of services provided by DLS, consult the chart on the next page.

ANALYTICAL SERVICES



3-4. ANALYSES PERFORMED.

The following chart lists the types of analyses performed by DLS.

ANALYSES PERFORMED	SAMPLE MATRICES ANALYZED
Military Unique Compounds	Water: Waste, Drinking, Ground, Surface
Metals	Hazardous Waste
Volatile & Semivolatile Organic Compounds	Soil and Sediment
Pesticides	Industrial Hygiene/Occupational Health (filters, wipes, personnel monitors, etc.)
Inorganic Material	Animal and Plant Specimens
Radioisotopes (Ra 226, 228, Sr, Am, DU, Tritium)	Air
Gross Alpha, Gross Beta, & Gamma Total and Isotopic Uranium	Clinical Specimens (Radiobioassay and RBC ChE)
Red Blood Cell Cholinesterase	Unknown Bulk Materials
Electron Microscope Images of Particles (Selective Elemental Analysis)	
Asbestos	

Emphasis on Military Unique Analyses

- ◆ Explosives
- ◆ Chemical agent degradation products
- ◆ Explosive taggants
- ◆ Depleted uranium (DU)
- ◆ Red and white phosphorus
- ◆ Permethrin
- ◆ Riot control (CS) agents

3-5. EXPANDED ANALYTICAL SERVICES.

In addition to performing standard sample analysis, DLS technical experts provide the following services:

a. **Document Review And Development.** DLS technical experts review a wide range of documents including:

- Quality assurance project plans and manuals
- Sampling plans and DQOs
- Technical guides
- Proposed methodology and standing operating procedures (SOP)
- Health Risk Assessment documents
- Draft regulations



b. **Third-Party Data Validation.** Periodically, scientists are called upon to review and validate data generated by laboratories outside DLS and to comment on the quality and usability of the data often for regulatory purposes.

c. **Consultation.** Resident within DLS are technical experts who can help you plan projects and interpret results that save time, money, and effort while assuring results will satisfy goals and objectives.

- Project scheduling
- Project planning and developing DQOs
- Design of sampling and analysis strategies
- Method selection
- Completion of request for analysis (CHPPM Form 330-R-E)
- Data review and interpretation
- Technical assistance and problem solving



- Serving as expert witnesses
- Development of national/international policy



SAVE TIME AND MONEY!



Contact the Consultants Office in the early stages of project planning.

d. **Training.** DLS experts have provided in-house and on-site training for military personnel, civilian engineers and scientists, and university graduates covering a variety of subjects including:

- Service.
 - ◆ Project planning (analytical emphasis).
 - ◆ Sample kit preparation.
 - ◆ Sample handling.
 - ◆ Documentation.
 - ◆ Tracking.
- Technical.
 - ◆ Theater Army Medical Laboratory.
 - ◆ Custom training (industrial hygienists, engineers, etc.).
 - ◆ Field training exercises.
 - ◆ Graduate courses in analytical instrumentation and environmental chemistry.
 - ◆ Cholinesterase analysis.

e. **Method Development and Special Projects.**

(1) The unprecedented environmental and occupational health problems presented by military operations often demand that sampling and analyses methods be developed in order to provide needed information. DLS scientists develop analytical methods or modify established procedures to meet client needs. By using innovative methods, DLS can--

- Identify and quantify unusual compounds.
- Reach lower detection limits.
- Adapt procedures to new matrices.



(2) Before use, each method is tested, documented, and validated according to accepted national standards. Many are specifically tailored to meet military needs (low level explosives; chemical agent break-down products; depleted uranium; nuclear, biological, and chemical-environmental, etc.)

f. **Field Support.**

(1) DLS has mobile laboratory capabilities that can be transported anywhere within CONUS and can be setup to perform onsite sample analyses. Instrumentation can also be shipped and setup in installation facilities. With DLS analysts on-site, project managers receive immediate feedback from sampling.



(2) With real time acquisition of data, project managers can--

- Quickly assess immediate health risks.
- Make operational decisions in the field.
- Optimize sampling use screening data saving both time and money.
- Meet tight reporting deadlines required in emergency situations.

(3) During deployment, real time feedback can be crucial to troop movement and assessing health threats. For sensitive public health issues, the presence of the mobile laboratory demonstrates the Army's commitment to protecting public health and solving problems expeditiously.

g. **Capabilities Increased By Contract Laboratory Support.**



(1) DLS uses qualified contract laboratories to increase in-house capabilities and to handle sample overflow during busy periods. Before any contract is signed with a commercial laboratory, the laboratory is carefully scrutinized.

- DLS chemists perform onsite inspections of the facilities and records.
- Blind samples are submitted to potential laboratories to test their competency.

(2) DLS oversight does not end with the award of the contract. The Contracting Officer's Representative, QC Manager, and senior analysts continue to monitor the laboratory's performance, reviewing QC records and data generated. If analyses cannot be performed in-house, DLS will locate a contractor that can do the work and will set-up the contract.

CHAPTER 4

COMMUNICATING AND INTERACTING WITH DLS

COMMUNICATING AND INTERACTING WITH DLS

4-1. EFFECTIVE COMMUNICATIONS.

a. **Teamwork.** Teamwork and effective communication are critical to achieving project goals. Whether filling out a CHPPM Form 330-R-E (see Chapter 6) or sending messages via e-mail, please provide complete information that is easily understood. If details are missing or the message is ambiguous, the project may be adversely affected and time wasted.



UNSURE OF SOMETHING

Ask our consultant(s).



b. **Planning a Project.** Consider DLS as a member of your project team and involve one of our consultants early in the planning process. Keep them informed throughout the life of the project. Alert them to any delays or cancellations of projects or substantial alterations in the number and type of samples or analyses required. Seemingly, minor changes can have serious repercussions.

LET DLS HELP YOU PLAN YOUR PROJECT

Get us involved in the beginning of your planning, and
we become a part of your project team.

c. **Tools of Communication.** When traveling and managing a heavy schedule, electronic sharing of information can be a life saver whether by telephone, e-mail, or fax. However, if the messages are unclear or incomplete, efforts are wasted. With the high volume of e-mail, filtering of information becomes critical.



Include project name and accounting number (e.g., sub-JONO) in the subject line of e-mail messages. This helps DLS identify the project and quickly reference all associated correspondence.

4-2. CUSTOMER SUPPORT SERVICES OFFERED BY DLS.

a. DLS Technical Consultants.



(1) When planning a project, the DLS consultants are the first people to contact within DLS. Their primary responsibility is to give customers the technical assistance they need to make sound decisions concerning the analytical aspects of projects from planning to data interpretation. They work with the customer to assure project DQOs are met.

(2) These senior scientists are experts in environmental testing, occupational health, special projects, and field analysis. The consultants serve as the primary liaison between customers and the analytical and administrative areas of DLS. If face-to-face discussions will facilitate planning, they will organize a meeting including participants from both DLS and your team to iron out project details (e.g., number of samples, methods, required QC, sample shipment and receipt, etc.).

b. Laboratory Project Coordinator. After the project has been accepted, the LPC works closely with the consultants and is responsible for coordinating and tracking projects once the client has made initial contact with the Consultants Office.

(1) The LPC works closely with customers, DLS consultants, sample processors, and team leads to identify and resolve problems.

(2) The LPC keeps all project participants informed of any significant changes that might impact on timely reporting of data.

c. Quality Manager. The quality manager will—

(1) Work with the customer in preparing Quality Assurance Plans.

(2) Assure that project DQOs are met.

(3) Monitor customer satisfaction.

(4) Recommend customer service improvements.

(5) Participate in internal and external working groups and committees dealing with quality improvement issues.

(6) Lead benchmarking efforts to measure DLS's work against others in the industry and to obtain ideas for improving quality and efficiency.

d. **Sample Kits Preparation and Shipping.**

(1) When requested, sample kits are prepared by the Sample Management Laboratory using information provided in the CHPPM Form 330-R-E.



(2) Sample kits contain containers, preservatives and labels needed for collection. (See chapter 7 for more details).

Be sure your containers are ready on time.
Submit your request early!



CHAPTER 5

SELECTING THE BEST TEST METHOD

SELECTING THE BEST TEST METHOD

5-1. BEST TEST METHOD SELECTION ASSISTANCE.

a. The DLS technical consultants can assist customers in selecting the best test method. See Chapter 4 for a discussion of their role and how to contact them.



b. DLS constantly updates the analyses available to DLS customers.

5-2. TEST METHOD SELECTION CONSIDERATIONS.

a. Selecting the most appropriate test method is critical for obtaining the laboratory analysis data needed to meet the DQOs of a project. Determining the best test method should be done during the first stages of project planning. See Figure 2-1 for DQO process steps.

b. Several factors need to be considered when selecting the best test method for a project. All factors are independent and should be considered concurrently.

Factors to consider when selecting the best test method for your project:

- ◆ Project DQOs
- ◆ Test descriptions for the parameters to be analyzed
- ◆ Methods mandated by Federal, State, and local authorities
- ◆ Method Reporting Limits (MRLs) required
- ◆ Matrix or matrices of the samples to be analyzed
- ◆ Sample priority
- ◆ Sample safety considerations
- ◆ Sample or site history
- ◆ Samples with short-holding times

5-3. SELECTING THE ACODE.

a. **What is the Acode?** The Acode (formerly called the DLS Test Code) is a “unique” number (i.e., similar to a catalog number) assigned by the DLS to each procedure.

b. **Why should the Acode be used?** The Acode is the simplest and most accurate means of referencing and identifying a specific test method and the parameters associated with that test method. Very often there are multiple procedures available for the same test method. The Acode offers a unique means of differentiating between these test methods and clearly indicates to DLS personnel exactly what the customer wants and needs.

The Acode clearly identifies--

- ◆ A specific test description.
- ◆ The standard method associated with the test description.
- ◆ The sample matrix or matrices required for the test description.
- ◆ The list of target compounds analyzed by the test description and the report limit of each compound.
- ◆ The sample collection criteria associated with the test description, including sample size, container, preservative, and holding time.
- ◆ The price of the specific test description.

c. **When should the Acode be selected and used?**



(1) The customer should note the corresponding Acode at the same time the best, or most appropriate, test methods are determined. The DLS Technical Consultants can assist customers in making their selection.

(2) DLS and their customers should use the Acode as a point of reference in the communication and correspondence process associated with each project. Consistent use of a specific Acode eliminates the possibility of miscommunications as to which test method is actually needed by the customer.

5-4. SAMPLE ANALYSIS PRIORITY DESIGNATIONS.


a. Sample analysis priorities are critical in determining the TATs and the price for each analysis. Samples are assigned processing priority based on three DLS sample analysis priorities:

- Standard
- High-priority
- Top-priority

PRIORITIES

b. Table 5-1 summarizes the guidelines for DLS sample analysis priorities. Unless otherwise specified, all samples are assigned standard priority. High-priority and top-priority requests should be coordinated with DLS in advance.

TABLE 5-1. GUIDELINES FOR DLS SAMPLE ANALYSIS PRIORITIES

	STANDARD	HIGH-PRIORITY	TOP-PRIORITY
BASIC SELECTION CRITERIA	Routine Analytical Response is Involved	Rapid Analytical Response is Desired	Fastest Analytical Response Possible as Needed
COSTS 	DLS Published Fee	1.5 Times the Published Fee	2.0 Times the Published Fee
TURNAROUND TIME (TAT)	20 Business Days	10 Business Days	5 Business Days
	<ul style="list-style-type: none"> ◆ The TAT for each analysis and sample type should be determined as part of the project DQOs and by mutual agreement with DLS. ◆ The specific TAT for each sample is analysis, matrix, and project dependant. ◆ TATs are affected by the number of samples involved for each analysis. 		

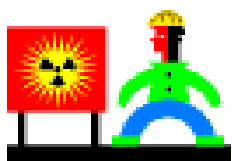
5-5. SAMPLE SAFETY CONSIDERATIONS.

a. DLS must be informed if samples are known or suspected of containing hazardous materials, either chemical or biological.

(1) Appropriate precautionary measures must be taken to protect everyone who will have any contact with these kinds of samples.



(2) Information concerning hazards, or possible hazards, must be part of the communication process with DLS and clearly indicated on all the paperwork and on the samples themselves.



b. Many chemicals used to preserve samples are considered to be hazardous materials. Sampling personnel must be informed about the possible hazards involved when handling these chemicals. Material Safety Data Sheets (MSDS) for chemical preservatives are included in the Sample Collection Kits.

5-6. ADDITIONAL SAMPLE OR PROJECT CONSIDERATIONS.

a. **Sample or Site Histories.** DLS can better serve its customers if the following sample or site information is provided.

- (1) Known or suspected high concentrations of the analyte of interest.
- (2) Known or suspected interfering substances that may impede the analysis of the sample.
- (3) Potential safety hazard.

b. **Short-Holding Time Sample Analyses.**

(1) Holding time is defined as the elapsed time from the date and time of sample collection until the sample is analyzed. Most holding times for analytes are mandated by USEPA in order to maintain the integrity of the analyte of interest.

**SHORT-
HOLDING
TIME**

(2) For the purposes of this manual, short-holding time analyses are considered to be those with a 48-hour or less holding time. In order to ensure analyses are performed in accordance with mandated holding times, customers need to make advance arrangements with DLS when requesting these types of analyses.

(3) Analyses must be performed within 48 hours of sample collection; therefore, samples should be collected early in the week, if possible. The customer should coordinate delivery of samples requiring short-holding time analyses. Discuss any concerns with a DLS consultant.

(4) Table 5-2 lists the environmental analyses that have 48-hours or less holding times.

Table 5-2. SHORT-HOLDING TIME ANALYSES (48 hours or less)

Parameter	Matrix	Holding Time
Asbestos	Water	24 hrs
BOD	Water	48 hrs
Chlorine	Water	24 hrs *
Color	Water	48 hrs
MBAS	Water	48 hrs
Nitrate (unpreserved)	Water	48 hrs
Nitrite (unpreserved)	Water	48 hrs
Ortho Phosphate	Water	48 hrs
pH	Water & Oil	24 hrs *
Settleable Solids	Water	48 hrs
Sulfite	Water	24 hrs
Turbidity	Water	48 hrs
Chromium VI	Water, Soil & Air	24 hrs
VOC	Soil (En Core™)	48 hrs
Total & Fecal Coliform	Water	24 hrs

* *Preferably measured in the field.*

**OTHER
HOLDING
TIMES**

c. **Other Holding Times.** To analyze samples for many organic compounds, USEPA requires that initial extractions be done within 7 days of sample collection. Exact holding time requirements vary with the analyte, matrix, method of analysis, and regulatory constraints. Consult the method for specific requirements or contact the DLS Consultants Office.

Avoid costly re-sampling!

To ensure your samples are analyzed or extracted within the required holding time, coordinate sampling and shipment of your samples with the DLS Consultants Office.



d. **Sample Retention.** Samples will be held by DLS no more than 30 days after the sample report is issued. Special arrangements for longer retention may be requested.

™ En Core is a trademark of En Novative Technologies, Inc., Green Bay, Wisconsin.

CHAPTER 6

**SUBMITTING REQUESTS FOR
LABORATORY SERVICES**

SUBMITTING REQUESTS FOR LABORATORY SERVICES

6-1. PURPOSE OF A REQUEST FOR LABORATORY SERVICES.

a. Submitting a Request for Laboratory Services form (CHPPM Form 330-R-E) should be one of the last steps in the project planning process. However, the information needed to complete this form should be established in the early stages of the project planning and communication process with DLS.

b. When requesting analyses, the customers should be very specific.

(1) Instead of using an ambiguous term, such as total metals, list specific analytes (for example, cadmium, copper, lead, mercury, zinc, etc.).

(2) Unclear or incomplete requests will result in a substantial delay in--

- Processing the requests.
- Analyzing the samples.
- Returning the results to the customer.

c. The CHPPM Form 330-R-E is used to generate:

(1) A cost quote for analytical services.

(2) A Container and Preservative Requirement Report, which is used to prepare an Environmental Sample Collection Kit.

d. This form is electronically available on the DLS HomePage at <http://chppm-www.apgea.army.mil/DLS/chppm330.doc>

e. A reproducible copy of this form is located in Appendix B.



6-2. COMPLETING A REQUEST FOR LABORATORY SERVICES.

Figure 6-1 provides an example of a completed CHPPM Form 330-R-E.
Figure 6-2 provides step-by-step instructions for completing the form.

FORM		
—	—	—
—	—	—
—	—	—
—	—	—

CHPPM
Form 330-R-E

Page 1 of 3

6-2

PART IV: PROJECT COORDINATION INFORMATION	
1.* ARE SAMPLING KIT/SUPPLIES NEEDED? <input type="radio"/> YES (Complete Item 2) <input type="radio"/> NO (Skip to Item 3)	
2.* DATE KIT/SUPPLIES REQUESTED BY: _____ a. Kit Handling Preference: (dd mmm yyyy) <input type="radio"/> PICK-UP by project officer <input type="radio"/> SHIP TO: (Please provide address in box below) Shipping Address: (include Bldg# and Phone#) <div style="border: 1px solid black; height: 100px; width: 100%;"></div> b. Number of coolers requested: _____	3.* EXPECTED # OF SHIPMENTS: _____ (For preparation of blanks) 4. SPECIAL HANDLING REQUIREMENTS: <input type="radio"/> CHAIN-OF-CUSTODY (COC) (COC document should be initialed in the field and forwarded with samples.) <input type="radio"/> SAFETY CONSIDERATIONS/HAZARDOUS MATERIALS (Specify): _____ <input type="radio"/> ANALYSES WITH SHORT-HOLDING TIMES (List Specific Analyses): _____ <input type="radio"/> OTHER (Specify): _____
PART V: ANALYTICAL REPORT OPTIONS	
1.* DELIVER RESULTS BY: (Indicate preference **A hard copy report will be furnished in all cases**) <div style="margin-top: 5px;"> <input type="radio"/> ELECTRONIC DATA DELIVERABLE (EDD): _____ <input type="radio"/> FAX TO: _____ <input type="radio"/> MAIL TO: _____ </div>	2. EDD DATA TYPE: <div style="margin-top: 5px;"> <input type="radio"/> Excel <input type="radio"/> Access <input type="radio"/> Other: _____ </div>
3. ADDITIONAL DATA REQUEST (These items are delivered by mail only): <input type="radio"/> QC REPORT <input type="radio"/> RAW DATA	
4.* REQUEST SUBMITTED BY: _____ 5. PRINT NAME: _____ (Authorizer) 6. SIGNATURE: _____ (Note: Authorizer's Signature Required if Submitted by Hard	
<div style="border: 1px solid black; height: 100%; width: 100%;"></div>	

Figure 6-1. Request for Laboratory Services (cont)

SAMPLE

Page 3 of 3

Figure 6-1. Request for Laboratory Services (cont)

INSTRUCTIONS FOR COMPLETING A REQUEST FOR LABORATORY SERVICES (CHPPM Form 330- R-E)**NOTE: * Indicates a required field.****PART I. PROJECT INFORMATION – Complete all sections.**

1. **Date of Request** - The date the form is submitted to CHPPM- Directorate of Laboratory Sciences (DLS).
2. ***Program Number:** Internal CHPPM-Main customers list the program number in which the project is associated. External CHPPM-Main customers list program number 00.
3. ***JONO:** An internal CHPPM-Main Accounting Number. For internal CHPPM-Main customers indicate the SUBJONO assigned to your project. CHPPM-Main external customers use X7G003.
4. ***SUBJONO:** An internal CHPPM-Main Project Job Number. For internal CHPPM-Main customers indicate the SUBJONO assigned to your project for laboratory analysis. CHPPM-Main external customers use 1236.
5. ***Project Officer(s):** List the name of the person responsible for the project or the project decision maker.
6. ***Telephone Number:** List the phone number of the project officer.
7. ***Was the Project Coordinated with DLS:** Indicate Yes or No – This will help prevent miscommunication and delays when processing your request.
8. **DLS Technical Consultant:** List the name of the DLS staff member you notified or coordinated with about the project.
9. ***Fund Source:** Indicate the category of funding your project is being submitted under.
10. ***Date Sample to Arrive At DLS:** List the date (dd mmm yyyy - 12 Dec 2000) you expect DLS to receive your samples. *Note: Prior arrangements must be made with DLS-SML for samples delivery outside of the routine duty hours (M-F 0800-1630 hrs). This requirement includes weekend and holiday deliveries.*
11. **Project Installation:** The installation or site where sampling is occurring.
12. **Location (State/Country):** List the location of the installation or site. This information helps the laboratory determine applicable regulatory laboratory quality standards.
13. **Project Name:** List the name of project as referred to in your project plan.

Figure 6-2. Instructions for Completing a Request for Laboratory Services

PART II. ANALYSIS REQUESTED.

1. **Project Description/Objective:** Write a brief description of the primary project objective. Indicate whether the samples are being analyzed for screening, monitoring, regulatory compliance, or health concern purposes.
2. **Sample or Site History:** Write a brief statement indicating any pertinent sample or site histories that DLS staff members should be aware of when analyzing the samples.
3. **Analytical Request Table:** List in the table on pages 1 and 3 (if needed) the analysis requested for the project.
 - a. Acode/DLS Test Code – CHPPM-DLS analytical procedure code (if known).
 - b. Analytical Method Description – Analysis name or abbreviation (e.g., Turbidity, VOCs, Lead, etc.).
 - c. Method Number – List the standard method number (e.g., NIOSH 1501, EPA 200.7, ASTM 1613).
 - d. Matrix – The predominate material for which the sample is to be analyzed (e.g., Drinking Water (DW), Soils, Air, Bulk, etc.).
 - e. Sample Count – The number of samples to be analyzed for each method and matrix.
 - f. Comments/Special Request – List any specific special comments or special supplies needed for each method and matrix (e.g., Blanks, Special Media, Extra Containers, Preservatives, Forms, etc.).
4. ***Are There Additional Analyses on Page 3?** Indicate Yes or No.

PART III. TURNAROUND REQUEST TIME - Complete all sections.

1. ***Project Turnaround (TAT) Time/Priority:** Select the priority you would like for your project. *Note: TAT is calculated using business days from date of sample receipt in the laboratory. Samples are routinely processed as Standard Priority. High-Priority and Top-Priority requests require coordination with DLS and are subject to cost surcharges.*
 - a. **Standard-Priority (20 days)**
 - b. **High-Priority (10 days)**
 - c. **Top-Priority (5 days)**

**Figure 6-2. Instructions for Completing a Request for Laboratory Services
(CHPPM Form 330-R-E) (con't)**

2. ***Date Results Needed:** List the actual date (dd mmm yyyy – 12 Jan 2000) you need your results. This information will assist the laboratory with scheduling your work.

PART IV. PROJECT COORDINATION INFORMATION.

1. ***Are Sampling Kit/Supplies Needed?** Indicate Yes or No.
2. ***Date Kit/Supplies Requested By:** List the actual date (dd mmm yyyy – 04 Dec 2000) you need your kit and/or supplies.
 - a. **Kit Handling Preference:** Indicate whether you will pick-up the kit or request that the laboratory ship it. If selecting the shipping option provide address (Do not use P.O. Boxes) and a telephone number at the shipping destination.
 - b. **Number of Coolers Requested:** Indicate the number of coolers you need us to ship to your project site.
3. ***Expected Number of Shipments:** Indicate the number of sample coolers you plan to ship to the laboratory (include direct shipment to our contract labs.). This information helps the laboratory determine how many “Trip Blanks” to prepare for your kit.
4. **Special Handling Requirements:** Check the handling requirements for your specific project.
 - a. **Chain of Custody (COC):** Check here if your project requires COC. COC is legal documentation of the possession and handling of a sample from the time of collection until final disposition.
 - b. **Safety Considerations/Hazardous Materials:** Briefly list the known associated hazardous and safety requirement for your samples. If available, provide the laboratory with a MSDS on the samples (e.g., See MSDS; Use personal protective equipment (PPE) when handling samples; etc.).
 - c. **Analyses with Short-Holding Times:** List the analyses that have less than 7 days holding times. Holding time is the elapse time from the date of sample collection until the initiation of the analytical procedure (e.g. BOD, Conductivity, pH, En Core™ Samples, Coliform, etc.).

**Figure 6-2. Instructions for Completing a Request for Laboratory Services
(CHPPM Form 330-R-E) (con’t)**

PART V. ANALYTICAL REPORT OPTIONS

1. **Deliver Results By:** ALL CHPPM-DLS customers will receive an original hard copy report of their analysis in addition to the alternative report options selected.
 - a. **Electronic Data Deliverable (EDD):** Provide e-mail address to send EDD.
 - b. **FAX TO:** Provide fax number to send Hard Copy Report.
 - c. **Mail To:** Provide complete mailing address. OCONUS customers provide your **FedEx** mail address. Do not list APO or PO Box addresses.
2. **EDD Data Type:** Select your EDD format type. Note that DLS uses the standard version of the software listed.
3. **Additional Data Request:** Indicate if you want the QC Report or Raw Data included in your Analytical Report Package.
4. ***Request Submitted By:** Write the name of the person submitting the request.
5. **Print Name of Authorizer:** Print the name of person authorizing the request.
6. **Authorizer's Signature:** Signature of the person authorizing the request required when submitting the CHPPM Form 330-R-E as a Hard Copy document.


**Figure 6-2. Instructions for Completing a Request for Laboratory Services
(CHPPM Form 330-R-E) (con't)**

6-3. SUBMITTING A COMPLETED CHPPM FORM 330-R-E.

This form should be submitted to DLS, either in electronic or hard copy form, at least 30 days before sample collection whenever possible.



- a. E-mail to “Sampnews” bulletin board as follows:

HOW TO SEND A MESSAGE TO “SAMPNEWS”	
	<ul style="list-style-type: none">◆ CHPPM Microsoft Outlook Users: In Outlook, click on “New,” in the “To” block type USACHPPM-Sampnews, type in your message, attach CHPPM Form 330-R-E for sample submission, and click “Send.”◆ All Customers: Type an e-mail message, attach CHPPM Form 330-R-E for sample submission, and send to chppm-sampnews@apg.amedd.army.mil

- b. Fax to one of the following numbers:

- DSN 584-4108
- Commercial 410-436-4108



- c. Mail a hard copy to the following address:

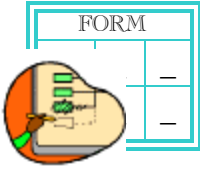
Commander, USACHPPM
ATTN: MCHB-TS-LID
5158 Blackhawk Road
Aberdeen Proving Ground, MD 21010-5403



6-4. RECEIPT CONFIRMATION.

DLS will send an e-mail message to confirm the receipt of every request for services.



6-5. MODIFYING REQUESTS FOR LABORATORY SERVICES.

CHPPM
Form 330-R-E

a. Contact DLS immediately with all changes to a processed CHPPM Form 330-R-E.

b. A sample "Sampnews" revision message to an original CHPPM Form 330-R-E request is shown in Figure 6-3. To be an effective communication tool, messages sent to "Sampnews" need to be easy to understand, complete, and with a header that clearly summarizes the content.

c. Submit all changes through the "Sampnews" bulletin board. This e-mail system is the most effective means of communicating with DLS, because all DLS staff members have access to this bulletin board.

To: Brown, Jane (LPC)
Copy: Smith, Joe (Consultant)
Subject: Camp Swampy #32-XX-XXXX, John Doe, Delay, Weekend Arrival

All:

The samples from my project at Camp Swampy (32-XX-XXXX, Phase 1) that were supposed to arrive on 25 April (see attached USACHPPM 330-R-E) will not be arriving at the lab until 28 April because of problems accessing the sample sites. Unfortunately, the 28th is on a Saturday, so you will need to make special arrangements to receive the shipment on the weekend. For tracking of the shipment, I will fax you a copy of the packing documents and the Federal Express tracking numbers. We anticipate shipping four coolers.

Preliminary measurements of conductivity taken in the field indicate the samples are high in salt. Please let me know ASAP if you encounter any problems or need to alter analytical methods because of the high salinity.

In addition to the 24 water samples promised, there will be four soil samples to be analyzed for chloride using EPA 300.0.

If there are any questions, I can be reached at (XXX) XXX-XXXX during the day (messages only since I will be in the field) and at (XXX) XXX-XXXX in the evening. My e-mail address is John.Doe@campswampy.army.mil

John Doe

Figure 6-3. "Sampnews" Revision Message to An Original CHPPM Form 330-R-E Request (Sample)

HOW TO SEND A MESSAGE TO "SAMPNEWS"



◆ **CHPPM Microsoft Outlook Users:**

In Outlook, click on "New," in the "To" block type USACHPPM-Sampnews, type in your message, attach CHPPM Form 330-R-E for sample submission, and click "Send."

◆ **All Customers:**

Type an e-mail message, attach CHPPM Form 330-R-E for sample submission, and send to chppm-sampnews@apg.amedd.army.mil

CHAPTER 7

SUBMITTING SAMPLES TO DLS

SUBMITTING SAMPLES TO DLS – USACHPPM MAIN

7-1. SAMPLE COORDINATION REQUIREMENTS FOR ENVIRONMENTAL AND OCCUPATIONAL HEALTH OCONUS CUSTOMERS SHOULD BE COORDINATED WITH THE NEAREST LABORATORY FACILITY:

OCONUS



a. Europe, Africa, Middle East should coordinate with:

USACHPPM-Europe: APO Mailing Address

Commander, USACHPPM-Europe
ATTN: MCHB-AE-LS (Customer Support Division)
CMR 402
APO AE 09180-3619



Commercial Mailing Address (for FedEx, UPS, etc.)

USACHPPM-Europe
Department of Laboratory Sciences
ATTN: Customer Support Division
Kirchberg Kaserne, Geb. 3810
66849 Landstuhl

Telephone Numbers

DSN 314-486-8381 or 7052
Commercial 011-49-6371-86-8381 or 7052



Fax Numbers

DSN 314-486-7054
Commercial 011-49-6371-86-7054



E-mail Address

DLS-HOTLINE@cpe.amedd.army.mil



b. Asia, Hawaii, Alaska should coordinate with:

USACHPPM-Pacific: APO Mailing Address

Commander, USACHPPM-Pacific
ATTN: MCHB-AJ-SL (Environmental Laboratory Division)
Camp Zama
APO AP 96343-5006



USACHPPM-Pacific: Commercial Mailing Address (for FedEx, UPS, etc.)
USACHPPM-PAC, ATTN: MCHB-AJ-LS/Laboratory
Building 715, Camp Zama
Zama-shi
Kanagawa-ken
Japan 228-8920



Telephone Numbers

DSN 315-263-8451
Commercial 01-81-3117-63-8451



Fax Numbers

DSN 315-263-8597
Commercial 011-81-3117-63-8597



E-mail Address

CHPPMPAC-LAB@jpn.amedd.army.mil

7-2. SAMPLE COORDINATION REQUIREMENTS FOR ENVIRONMENTAL AND OCCUPATIONAL HEALTH CONUS CUSTOMERS SHOULD COORDINATE ACTIVITIES AS FOLLOWS:



Mailing Address (routine correspondence/samples)

Commander, USACHPPM
ATTN: MCHB-TS-LID (Sample Management Laboratory)
5158 Blackhawk Road
Aberdeen Proving Ground, MD 21010-5403

Commercial Mailing Address (for FedEx, UPS, etc.)

Commander, USACHPPM
ATTN: MCHB-TS-LID (Sample Management Laboratory)
Building E2100
Aberdeen Proving Ground, MD 21010-5403



Telephone Numbers

DSN 584-2208
Commercial 410-436-2208



Fax Numbers

DSN 584-4108
Commercial 410-436-4108

E-mail Address



◆ CHPPM Microsoft Outlook Users:

In Outlook, click on “New,” in the “To” block type USACHPPM-Sampnews, type in your message, attach CHPPM Form 330-R-E for sample submission, and click “Send.”

◆ All Customers:

Type an e-mail message, attach CHPPM Form 330-R-E for sample submission, and send to:

chppm-sampnews@apg.amedd.army.mil

7-3. ENVIRONMENTAL SAMPLE COLLECTION KITS.



DLS prepares and provides upon request environmental sample collection kits. These kits are customized for specific projects, with labels and supplies issued according to project needs and customer request. Kit containers are selected and labeled for a specific analysis. These should not be interchanged without prior coordination. Contact a DLS consultant when using containers not supplied by DLS to ensure container specifications meet laboratory requirements. DLS sample collection kits are prepared using quality containers and supplies:

- a. The glass containers and plastic wares used to prepare DLS sample kits are purchased clean according to USEPA requirements. Each purchase is received with a certificate of analysis, which certifies container cleanliness.
- b. Sample kit supplies may include preservatives, pipette bulbs, custody labels, pertinent paperwork, sample blanks, packaging material, temperature bottle, etc.

7-4. OCCUPATIONAL HEALTH SAMPLE COLLECTION REQUIREMENTS.

Detailed instructions concerning occupational health sample collection requirements can be found in USACHPPM TG 141 which is available on the USACHPPM HomePage at <http://chppm-www.apgea.army.mil/imo/ddb/dmd/DMD/TGs.htm>



7-5. RADIOBIOASSAY SAMPLE COLLECTION REQUIREMENTS.

Detailed instructions concerning radiobioassay collection requirements can be found in USACHPPM TG 211 which is available on the USACHPPM HomePage at <http://chppm-www.apgea.army.mil/imo/ddb/dmd/DMD/TGs.htm>



7-6. SAMPLE REJECTION.



- a. To assure quality results to the customer, samples that do not meet the acceptance criteria established by regulatory agencies or DLS will be rejected. Sample Custody Coordinators and DLS technical staff members have the right to reject samples.
- b. When samples are rejected, a sample rejection form is used for documentation and states:
 - Who rejected the sample
 - The reason for the rejection
 - When the project officer was notified
- c. When a project officer or other approval authority makes a decision to have rejected samples analyzed, the request will be documented on the sample rejection form, and the results for the sample will be qualified.
- d. A copy of the rejection form will be forwarded to the customer.

7-7. REQUIRED SHIPMENT FORMS.

FORMS		
—	—	—
—	—	—

- a. Table 7-1 lists the required sample submission/shipment forms.

TABLE 7-1. REQUIRED DLS SHIPMENT FORMS

ENVIRONMENTAL	OCCUPATIONAL HEALTH
CHPPM Form 75-2-E (<i>Listing of Specific Chemical Analyses</i>)	CHPPM Form 8-R-E (<i>Bulk Sample Data</i>) <i>or</i> CHPPM Form 9-R-E (<i>Occupational Health Air Sample Data</i>)
CHPPM Form 330-R-E (<i>Request for Laboratory Services</i>)	
If required: CHPPM Form 235-R-E (<i>Chain-of-Custody Record</i>)	

b. These and other DLS forms are available at the following address on the DLS web site:

<http://chppm-www.apgea.army.mil/dls/pub.asp>



c. These forms may also be reproduced from the copies available in Appendix B.

7-8. SAMPLE FIELD IDENTIFICATION, PRESERVATION, AND LABELING.

a. FIELD IDENTIFICATION - DLS – Sample Management Laboratory (SML) must keep track of your samples and sample information. Using the “**unique**” Field Identification (ID) Number you provide, we check your packing list or Chain of Custody (COC) documents to account for every sample and each container received. Listed are several tips on how to simplify field numbering:



- (1) Keep numbering simple, use a consistent system.
- (2) Establish the numbering system to be used before collecting the samples.
- (3) Clearly label blank and duplicate samples such as Blank-1, Blank-2, Duplicate-1, Duplicate-2, etc.
- (4) Samples with multiple containers – The containers for each sample should be marked with the same ID and a unique suffix (a, b, c).

b. PRESERVATION – Annotate on the collection container whether preservative has been added to the sample. Each label affixed to the container or provided by DLS should have the preservation recommended by DLS for the specific analysis. Some containers provided will already contain the preservative prescribed and these containers must not be rinsed. Samples requiring preservation at 4° C must be shipped under refrigerated conditions. To help maintain refrigerated conditions, it is recommended that the cooler be cooled down before storing or packaging samples if possible.



c. LABELING – Labels provided by DLS-SML contain standard information fields which are to be filled out by the customer. Waterproof permanent ink markers are recommended for use when writing on the labels. See Figure 7-1 “Field Sample Container Label” (LISMD Form 34S).

PROJECT:	32-XX-XXXX
INSTALLATION:	CAMP SWAMPY
POC:	JOHN DOE
FIELD #:	NW-1
DATE COLLECTED:	19 MAY 2000
TIME COLLECTED:	1430
SAMPLE PRESERVED:	pH<2 HNO ₃
ANALYSIS REQUIRED:	CADMIUM

LISMD Form 34S

Figure 7-1. Field Sample Container Label (Sample)

7-9. SAMPLE PACKING INSTRUCTIONS.



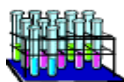
- a. Know which samples require special handling, packing, or shipment. Radiochemistry tests, in particular, often require special handling.



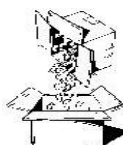
- b. Verify that all sample container caps and lids are tight and not leaking.



- c. Mark the level of liquid in sample containers with indelible ink. If a sample leaks during shipment, DLS will contact the project officer and a decision will be made as to whether the sample needs to be recollected.



- d. Set the sample containers in an upright position in the shipping container (which must be leak-proof). Acceptable containers and coolers can be obtained from DLS upon request.



- e. Place an absorbent in the shipping container. This is absolutely necessary if any samples contain, or are suspected of containing, hazardous material. Be sure to include enough material to absorb all of the liquid in the shipment if sample leakage occurs.

- f. Use suitable packing materials (bubble wrap is preferred) to prevent breakage of samples.

(1) Wrap each glass container with enough suitable packing material to prevent contact with other containers or the outer box.

(2) Seal small vessels containing liquids in plastic bags or aluminum foil depending on the analysis requested. For example, biological samples for pesticide analyses require aluminum foil, while biological samples for metals require plastic bags. This practice ensures sample integrity and prevents contamination of an entire shipment if a sample leaks.

g. Use a cooler and refrigerants to maintain the samples at the temperature prescribed by the sampling and analysis procedure. Refer to Table 7-2 to determine the amount of refrigerant sufficient to achieve 3.5 - 5.5 °C.



When shipping in a cooler and using refrigerant to maintain the samples at the temperature prescribed by the sampling and analysis procedure--

- ◆ Pre-cool shipping coolers before shipping.
- ◆ Use ice as a refrigerant. Ice must be sealed in heavy double-layered plastic bags to prevent leakage as it melts. Zip-lock type freezer bags are recommended because of their extra thickness.
- ◆ Use pre-frozen gel blocks when extended refrigeration is required. Do not allow blocks to come in direct contact with the samples.
- ◆ Use dry ice only when special sample requirements require its use. Verify shipping regulations before shipping samples.

CAUTION – Short Term (24-48 hours)

TABLE 7-2. REFRIGERANT REQUIREMENTS


Container size	Pounds of Pre-frozen Gel Blocks	Hours Maintained Between 3.5 – 5.5°C
Small [½ pint (pt)]	3.5	111
Medium (1 pt)	7.5	116
Large [1 quart (qt)]	18.0	122
Extra Large [1 gallon (gal)]	21.0	120

All containers should be pre-cooled to 4.0°C before packing.

7-10. SHIPMENT REQUIREMENTS AND SPECIFICS.

Table 7-3 outlines shipping requirements and specifics.

**TABLE 7-3. SHIPMENT REQUIREMENTS AND SPECIFICS**

STANDARD ANALYSIS SAMPLES	CAN BE SENT BY: <ul style="list-style-type: none"> ◆ Priority First Class mail ◆ Certified U.S. Mail  <p>Do Not Send Hazardous Materials by U.S. Mail. Do Not Use Registered Mail Since It Is Not Delivered Directly To Building E2100</p> <ul style="list-style-type: none"> ◆ Commercial carriers, such as FedEx or UPS ◆ Hand carried to Building E2100, Aberdeen Proving Ground (APG), Edgewood Area
PRIORITY SAMPLE OR SHIPMENTS CONTAINING SAMPLES: <ul style="list-style-type: none"> ◆ With short-holding times ◆ That must be kept refrigerated or frozen 	MUST BE: <ul style="list-style-type: none"> ◆ Shipped by overnight express (FedEx or UPS) ◆ Hand carried to Building E2100, APG, Edgewood Area
FedEx SPECIFICS	<ul style="list-style-type: none"> ◆ Packages shipped overnight arrive by 1200 the next day ◆ Samples cannot be picked up on Sunday ◆ Samples sent on Friday will be delivered Monday, unless the shipment is clearly marked "Saturday Delivery"
SHIPMENTS ARRIVING OUTSIDE OF NORMAL SERVICE HOURS (M-F, 0800 – 1630)	Require advance arrangements with DLS before the samples are shipped
SHIPMENTS MUST COMPLY WITH ALL APPLICABLE REGULATIONS	<ul style="list-style-type: none"> ◆ Department of Transportation (DOT) ◆ State and Local Governments ◆ Hazardous Waste ◆ Radiochemical ◆ Biohazard

If shipping from OCONUS—

- ◆ Shipment will have to go through customs, so expect potential delays.
- ◆ List the contents as "Laboratory Samples."
- ◆ Label the shipment as "Property of the U.S. Government."
- ◆ Contact the nearest USACHPPM Laboratory for assistance, if needed.

7-11. PROJECT PLANNING/SAMPLE SUBMISSION CHECKLIST

A suggested project planning/sample submission checklist is shown in Figure 7-2.



PROJECT PLANNING/SAMPLE SUBMISSION CHECKLIST	
PLANNING PHASE	
_____	Contact a DLS consultant to discuss sampling plan, DQOs, Quality Assurance Project Plan, etc.
_____	Complete USACHPPM 330-R-E for environmental projects or the USACHPPM 8-R-E/9-R-E form for industrial hygiene (IH) sampling, and forward the request for services to the "Sampnews" bulletin board.
_____	Review laboratory replies to your analytical request. Communicate questions or problems through the "Sampnews" bulletin board and the Consultants Office.
_____	Notify DLS and the consultant, via the "Sampnews" bulletin board, of any changes or delays in your initial plan.
_____	Await contact from DLS for the pick-up of your sample containers or notification of container shipment, per your request.
ON-SITE	
_____	Notify DLS and the consultants, via the "Sampnews" bulletin board or telephone, of any changes to project plans, delays, or problems.
_____	Preserve, label, and carefully pack samples. (Consult paperwork/instructions enclosed with sample kit.)
_____	Complete packaging list (CHPPM Form 75-2-E) or Chain-of-Custody Record (CHPPM Form 235-R-E) detailing the contents of each cooler, and include this paperwork with each cooler.
_____	Notify Sample Management Laboratory (SML) when lab samples shipped. This notification could be via an e-mail message to the "Sampnews" bulletin board, a fax, or a telephone call to the Consultants Office. Where possible, include copies of the packing list and indicate the number of coolers being shipped.
_____	Verify entire shipment has been received by the lab. Contact SML <u>from the field</u> to verify the condition of the samples upon receipt and confirm that all shipments have been received. (This is especially important if several shipments have been made.) Within a week of sampling, the SML will send an e-mail message to verify sample receipt and document their condition upon arrival.

Figure 7-2. Project Planning/Sample Submission Checklist (Sample)

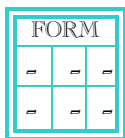
7-12. CHAIN OF CUSTODY.

a. The policy is that the chain of custody is project specific and that the project officer determines which projects are to be under the chain of custody.

b. The requirements for chain of custody needs to be indicated on CHPPM Form 330-R-E when submitting a request to DLS. For the project officer, the chain of custody starts with sample collection.

(1) When shipping, a seal must be placed on the cooler or container being sent to the laboratory. An unbroken seal will indicate that the samples were not tampered with in shipment.

(2) The returning samples will be maintained under a chain of custody in the laboratory.



CHPPM
Form 235-R-E

c. Appendix B contains a copy of a CHPPM Form 235-R-E that must be completed by the project officer.

d. Table 7-4 contains a list of frequently asked questions on chain of custody.

TABLE 7-4. FREQUENTLY ASKED QUESTIONS ON CHAIN OF CUSTODY

Question	Answer
What is chain of custody (COC)?	<p>1. A procedure that provides accountability and documentation of sample integrity from the receipt of the sample in DLS until disposal or consumption. A sample is in someone's "custody" if:</p> <ul style="list-style-type: none"> a. It is in one's actual physical possession; b. It is in one's view, after being in one's physical possession; c. It is one's physical possession and then locked up so that it can't be tampered with; d. It is kept in a secured area, restricted to authorized personnel only. <p>2. This sample will include both original sample and prepared aliquot(s).</p> <p>3. This procedure represents a means to establish a reasonable probability that:</p> <ul style="list-style-type: none"> a. This COC record is supportable if the necessity arises. b. The sample that was collected is the same sample that was analyzed, reported, and disposed. c. The sample was not altered, changed, or otherwise compromised.
Is there a DLS SOP covering COC?	Yes, it is DLS SOP #5 and is available to all employee's on the intranet. All of our Quality System documentation can be accessed from the DLS home page.
Do all samples require handling under COC?	No. Samples are usually handled under COC if there is a possibility that the results may be used in litigation.

TABLE 7-4. FREQUENTLY ASKED QUESTIONS ON CHAIN OF CUSTODY (con't)

Question	Answer
Who decides if samples are to be handled under COC?	The project officer or, in the case of mail-ins, the sample submitter.
How is COC handled in DLS?	<ol style="list-style-type: none">1. Original field COC forms together with the sample(s) are received in SML. The original field form(s) is/are maintained in SML.2. Internal COC form(s) is/are created in SML, transferred with the sample(s) to respective Division/Team laboratories, signed, and date/time stamped to show transfer of the samples.3. The Division/Team sample custodian will sign and time/date stamp the form to show acceptance of the samples and store them in a secure storage area.4. When the samples are needed for analysis, the sample custodian shall relinquish custody to the analyst by signing and placing the time and date and reason for relinquishing custody on the internal COC form.5. The analyst shall accept custody of the samples from the sample custodian by signing the block provided on the internal COC form and filling in the time, date, and reason for transfer of custody.6. Division records generated (analyst's notebooks, project files, and/or work list) will establish any additional custody requirements throughout that Division.

CHAPTER 8

SUBMITTING A DLS CUSTOMER COMMENT/COMPLAINT FORM

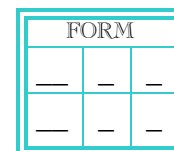
SUBMITTING A DLS CUSTOMER COMMENT/COMPLAINT FORM

8-1. OVERVIEW.

a. The customer should complete a CHPPM Form 332-R (DLS Customer Comment/Complaint Form) to provide feedback concerning issues that include:

- Complaints, comments, or compliments about service or data
- Suggestions for process improvements that will improve the efficiency or quality of DLS work
- Health or safety problems and concerns
- Known or suspected deficiencies in approved data.
- Ideas for new services or products

b. All comments directed to DLS are answered after appropriate review and corrective action. The originator of the comment will be contacted concerning the action taken.

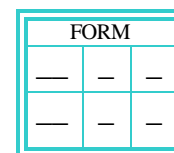


CHPPM
Form 332-R

8-2. ACCESSING AND TRANSMITTING THE DLS CUSTOMER COMMENT/COMPLAINT FORM.

a. Assessing the form.

- A reproducible copy of this form is located in Appendix B.
- This form is electronically available on the DLS HomePage at <http://chppm-www.apgea.army.mil/DLS/>



CHPPM
Form 332-R



b. Transmitting the form. This form can be transmitted to DLS using one of the following methods:

- Mailing to: Commander, USACHPPM
ATTN: MCHB-TS-L (Quality Compliance Manager)
5158 Blackhawk Road
Aberdeen Proving Ground, MD 21010-5403





- Faxing to one of the following numbers:
 - ◆ DSN 584-8315
 - ◆ Commercial 410-436-8315

APPENDIX A
REFERENCES

REFERENCES

1. Contract Laboratory Program: *User's Guide to the Contract Laboratory Program*, EPA/540/P-91/002, Office of Emergency and Remedial Response, Environmental Protection Agency, Washington DC, January 1991.
2. Contract Laboratory Program: *Statement of Work for Organic Analysis*, Multi-media, Multi-Concentration, Document OLMO 1.0-OLMO 1.9, July 1993.
3. Contract Laboratory Program: *Statement of Work for Inorganic Analysis*, Multi-media, Multi-Concentration, Document ILMO 2.0-ILMO 3.0, 1992.
4. EPA Administered Permit Programs: *The National Pollutant Discharge Elimination System*, Title 40, CFR, Part 122, latest revision.
5. *Guidelines Establishing Test Procedures for the Analysis of Pollutants*, Title 40, CFR, Part 136, latest revision.
6. *Identification and Listing of Hazardous Waste*, Title 40, CFR, Part 261, latest revision.
7. *Methods for Chemical Analysis of Water and Wastes*, EPA 600/4-79/020, 1979.
8. *Methods for the Determination of Metals in Environmental Samples*, EPA 600/4-91/010, June 1991.
9. *Methods for the Determination of Organic Compounds in Drinking Water*, EPA 600/4-88/039, December 1988, with Supplement 1, EPA 600/4-90/020, July 1990, and Supplement 2, EPA 600/R-92/129, August 1992.
10. *National Primary Drinking Water Regulations*, Title 40, CFR, Part 141, latest revision.
11. *National Secondary Drinking Water Regulations*, Title 40, CFR, Part 143, latest revision.
12. *NIOSH Manual of Analytical Methods*, U.S. Department of Health and Human Services, Fourth Edition, August 1994.
13. *Official Methods of Analysis of the Association of Official Analytical Chemists*, 17th Edition, AOAC, 2000.
14. *Preventive Medicine*, Army Regulation 40-5, Headquarters, Department of the Army, Washington DC, 15 October 1990.

15. *Standard Methods for the Examination of Water and Wastewater*, 19th Edition, American Public Health Association, American Water Works Association, Water Environment Federation, 1995.
16. *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*, EPA/SW-846, Third Edition, 1986 and Revision 1, July 1992.
17. USACHPPM TG No. 211, *Radiobioassay Collection, Labeling, and Shipping Requirements*, May 1996.
18. USACHPPM *DLS Quality Assurance Manual*, current edition.
19. USACHPPM TG No. 141, *Industrial Hygiene Air Sampling and Bulk Sampling Instructions*, November 1997.

APPENDIX B
CHPPM FORMS

INDUSTRIAL HYGIENE BULK SAMPLE DATA CHPPM FORM 8-R-E	FOR DLS USE ONLY LIMS Job #: _____ Date Received: _____ Processor's Initials: _____
<p style="text-align: center;">IMPORTANT</p> <p><i>Before the form is filled out electronically in a wordprocessing program, CHANGE THE KEYBOARD FUNCTION OVER TO "TYPEOVER" BY PRESSING THE INSERT" KEY before typing in the characters which will replace the lines.</i></p>	
SECTION A: GENERAL INFORMATION	
1. IS THIS A DUPLICATE COPY FOR ADVANCED NOTICE OF INCOMING SAMPLES? Y (Yes) or N (No) 2. Is a MSDS Enclosed for Safety Information for Laboratory Personnel? Y (Yes) or N (No) 3. PROJECT NUMBER (15 Characters Maximum): _____ 4. IH Resource POC ID # (20 Characters): _____ 5. Primary Resource?: Y or N 6. LAST Name (20 Characters Maximum): _____ 7. FIRST Name (20 Characters Maximum): _____ 8. Phone Number (20 Characters Maximum): _____ 9. DSN: _____ 10. Street (25 Characters Maximum): _____ 11. City (25 Characters Maximum): _____ 12. State (2 Characters Maximum): _____ 13. Zip Code + 4 (10 Characters Maximum): _____ 14. Country (20 Characters Maximum): _____ 15. Name of Sampled Installation (50 Characters Maximum): _____ 16. ARLOC (10 Characters Maximum): _____ (See SECTION E: LOCATION AND OPERATION INFORMATION for more codes and information) 17. Associated Complaints/Investigative/HHIM (Be Specific/State "NONE" if applicable) 18. Sample Collector ID # (20 Characters Maximum): _____ 19. LAST Name (20 Characters Maximum): _____ 20. FIRST Name (20 Characters Maximum): _____ 21. Associated Air Samples?: Y (Yes) or N (No) 22. Air Sample Field ID Numbers, If Applicable: _____ _____ Note: Air Samples Must Be Shipped in a Separate Container from Bulk Samples.	
23. Date Collected (mmddyyyy): _____ 24. Date Shipped (mmddyyyy): _____	
Page 1 of 4 CHPPM Form 8-R-E, 1 Nov 97 (Update March 2, 1998) Replaces AEHA Form 8-R, 1 Oct 84 which is obsolete.	

SECTION B: ANALYSIS INFORMATION

NOTE: 1) ALL SAMPLES WILL BE ANALYZED FOR ALL THE TESTS INDICATED IN THIS SECTION.
2) IF AN ANALYTE INDICATES THE CAS# IS "VARIOUS", LEAVE THE SPACE FOR CAS# BLANK.

25a. Analysis #1 Hazard Name: _____

25b. #1 DLS Test Code: _____ 25c. #1 CAS # _____

26a. Analysis #2 Hazard Name: _____

26b. #2 DLS Test Code: _____ 26c. #2 CAS # _____

27a. Analysis #3 Hazard Name: _____

27b. #3 DLS Test Code: _____ 27c. #3 CAS # _____

28a. Analysis #4 Hazard Name: _____

28b. #4 DLS Test Code: _____ 28c. #4 CAS # _____

29a. Analysis #5 Hazard Name: _____

29b. #5 DLS Test Code: _____ 29c. #5 CAS # _____

SECTION C: SAMPLE INFORMATION

NOTE: ALL SAMPLES WILL BE ANALYZED FOR ALL THE TESTS INDICATED IN SECTION B.

30. Field Sample ID Number (15 Characters Maximum)	31. Laboratory Number (Leave Blank) (To Be Completed by the Laboratory)	32. Remarks

33. COMMENTS TO LABORATORY

SECTION D: LABEL INFORMATION

34. **Trade Name** (30 Characters Maximum): _____
35. **NSN** (15 Characters): _____ 36. **MSDS Attached:** **Y (Yes) or N (No)**
37. **Manufacturer** (25 Characters Maximum): _____
38. **Street Address** (25 Characters Maximum): _____
39. **City** (25 Characters Maximum): _____
40. **State** (2 Characters): _____ 41. **Zip Code + 4** (10 Characters Maximum) _____
42. **Country** (20 Characters Maximum): _____

SECTION E: LOCATION AND OPERATION INFORMATION

43. **Building/Area** (20 Characters Maximum): _____
44. **Location Name** (50 Characters Maximum): _____
45. **Operation Name** (50 Characters Maximum): _____
46. **Operation Employee(s) Perform**

47. **# of Persons Exposed** (3 Characters Maximum): _____
48. **Exposure Duration and Frequency**
- 48a. **Minutes** (4 Char.) _____ 48b. **Time(s) per Day** (4 Char.) _____ 48c. **Total Minutes/Day** (4 Char.) _____
- 48d. **Days/Week** (1 Char.) _____ 48e. **Days/Month** (2 Char.) _____ 48f. **Months/Year** (2 Char.) _____
49. **Source of Contaminant:**

SECTION F: FIELD NOTES/ADDITIONAL COMMENTS

50. HHIM Submitted ?: **Y (Yes)** **or** **N (No)**

51. Field Notes/Comments:

INDUSTRIAL HYGIENE AIR SAMPLE DATA

CHPPM FORM 9-R-E

FOR DLS USE ONLY

LIMS Job #: _____

Date Received: _____

Processor's Initials: _____

IMPORTANT

Before the form is filled out electronically in a wordprocessing program, **CHANGE THE KEYBOARD FUNCTION OVER TO "TYPEOVER" BY PRESSING THE "INSERT" KEY** before typing in the characters which will replace the lines.

SECTION A: GENERAL INFORMATION

1. IS THIS A DUPLICATE COPY FOR ADVANCED NOTICE OF INCOMING SAMPLES? Y (Yes) or N (No)

2. Is a MSDS Enclosed for Safety Information for Laboratory Personnel? Y (Yes) or N (No)

3. PROJECT NUMBER (15 Characters Maximum): _____

4. IH Resource POC ID # (20 Characters): _____ 5. Primary Resource?: Y or N

6. LAST Name (20 Characters Maximum): _____

7. FIRST Name (20 Characters Maximum): _____

8. Phone Number (20 Characters Maximum): _____ 9. DSN: _____

10. Street (25 Characters Maximum): _____

11. City (25 Characters Maximum): _____

12. State (2 Characters Maximum): _____ 13. Zip Code + 4 (10 Characters Maximum): _____

14. Country (20 Characters Maximum): _____

15. Name of Sampled Installation (50 Characters Maximum): _____

16. ARLOC (10 Characters Maximum): _____

(See SECTION E: LOCATION AND OPERATION INFORMATION for more codes and information)

17. Associated Complaints/Investigative/HHIM (Be Specific/State "NONE" if applicable)

18. Sample Collector ID # (20 Characters Maximum): _____

19. LAST Name (20 Characters Maximum): _____

20. FIRST Name (20 Characters Maximum): _____

21. Associated Bulk Samples?: Y (Yes) or N (No)

22. Bulk Sample Field ID Numbers, If Applicable: _____

Note: Bulk Samples Must Be Shipped in a Separate Container from Air Samples.

23. Collection Method/Media (25 Characters Maximum): _____

24. Date Collected (mmddyyyy): _____

25. Date Shipped (mmddyyyy): _____

SECTION B: ANALYSIS INFORMATION

NOTE: 1) ALL SAMPLES WILL BE ANALYZED FOR ALL THE TESTS INDICATED IN THIS SECTION.
2) IF AN ANALYTE INDICATES THE CAS# IS "VARIOUS", LEAVE THE SPACE FOR CAS# BLANK.

26a. Analysis #1 Hazard Name: _____	26c. #1 CAS #: _____
26b. #1 DLS Test Code: _____	
27a. Analysis #2 Hazard Name: _____	27c. #2 CAS #: _____
27b. #2 DLS Test Code: _____	
28a. Analysis #3 Hazard Name: _____	28c. #3 CAS #: _____
28b. #3 DLS Test Code: _____	
29a. Analysis #4 Hazard Name: _____	29c. #4 CAS #: _____
29b. #4 DLS Test Code: _____	
30a. Analysis #5 Hazard Name: _____	30c. #5 CAS #: _____
30b. #5 DLS Test Code: _____	

SECTION C: SAMPLE INFORMATION

NOTE: ALL SAMPLES WILL BE ANALYZED FOR ALL THE TESTS INDICATED IN SECTION B.

31. Field Sample ID # (15 Char. Max)						
32. Pump Serial # (10 Char. Max)	B L A N K					
32a. Time On						
32b. Time Off						
32c. Total Time (Minutes)						
33. Flow Rate (LPM)						
34. Total Volume (L) [Flow Rate X Total Time]						
35. GA/BZ/S						
36. Employee ID						
37. Laboratory # (To Be Assigned By Lab)						

COLLECTION AND SAMPLING DATA - TABLE 2 (If Needed for Additional Samples)

31. Field Sample ID # (15 Char. Max)						D O N O T U S E
32. Pump Serial # (10 Char. Max)						
32a. Time On						
32b. Time Off						
32c. Total Time (Minutes)						
33. Flow Rate (L/Min)						
34. Total Volume (L) [Flow Rate X Total Time]						
35. GA/BZ/S						
36. Employee ID						
37. Laboratory # (To Be Assigned By Lab)						

38. COMMENTS TO LABORATORY**SECTION D: CALIBRATION INFORMATION****39. Pump Calibrator ID #** (20 Characters Maximum): _____**40. LAST Name** (20 Characters Maximum): _____**41. FIRST Name** (20 Characters Maximum): _____

42. Pump Serial # (10 Characters Maximum)	43. Calibration Information <i>Note: See TG 141, Chapter 2, Section 2-10f for Information on Sampling Pump Flow Rate Calibrations and Reporting</i>				44. Unit Code (LPM)	45. Calibration Setting (30 Character Maximum)
	43a. Pre-Cal Result	43b. Pre-Cal Date	43c. Post-Use Result	43d. Post-Use Date		

SECTION E: LOCATION AND OPERATION INFORMATION**46. Building/Area** (20 Characters Maximum): _____**47. Location Name** (50 Characters Maximum): _____**48. Operation Name** (50 Characters Maximum): _____**49. Operation Employee(s) Perform****50. # of Persons Exposed** (3 Characters Maximum): _____**51. Exposure Duration and Frequency****51a. Minutes** (4 Char.) _____ **51b. Time(s) per Day** (4 Char.) _____ **51c. Total Minutes/Day** (4 Char.) _____**51d. Days/Week** (1 Char.) _____ **51e. Days/Month** (2 Char.) _____ **51f. Months/Year** (2 Char.) _____

52. *Source of Contaminant:*

SECTION F: FIELD NOTES/ADDITIONAL COMMENTS

53. *HHIM Submitted ?:* Y (Yes) or N (No)

54. *Field Notes/Comments:*

DLS Packing List

LISTING OF SPECIFIC CHEMICAL ANALYSES															PAGE ____ OF ____
1. REQUESTOR SAMPLE NO. →															REMARKS
2. LABORATORY NO. →															
3. ANALYSIS ↓															

CHAIN-OF-CUSTODY RECORD
The Proponent of This Form is the Directorate of Laboratory Sciences

INSTALLATION _____ PROJECT NO. _____ PROJECT OFFICER _____ PACKED BY _____ NOTE: For use of this form, see AEHA TG 155, or DLS SOP NO. 5						T O T A L #	SAMPLE PARAMETER																						
TOTAL																													
DATE SHIPPED: _____							CARRIER USED: _____						SEAL INTACT: YES ? NO ?																
LAB NUMBER	RELINQUISHED BY			DATE/TIME		RECEIVED BY										DATE/TIME		COMMENTS											
REMARKS																													

CHAIN-OF-CUSTODY RECORD
The Proponent of This Form is the Directorate of Laboratory Sciences

[illegible]

REMARKS

SAMPLE DISPOSAL RECORD

[illegible]

PART IV: PROJECT COORDINATION INFORMATION

1.* ARE SAMPLING KIT/SUPPLIES NEEDED?

☐ YES (Complete Item 2)☐ NO (Skip to Item 3)

2.* DATE KIT/SUPPLIES REQUESTED BY: _____

a. Kit Handling Preference: _____ (dd mmm yyyy)

☐ PICK-UP by project officer☐ SHIP TO: (Please provide address in box below)

Shipping Address: (include Bldg# and Phone#)

b. Number of coolers requested: _____

3.* EXPECTED # OF SHIPMENTS: _____
(For preparation of blanks)

4. SPECIAL HANDLING REQUIREMENTS:

☐ CHAIN-OF-CUSTODY (COC) (COC document should be initialed in the field and forwarded with samples.)☐ SAFETY CONSIDERATIONS/HAZARDOUS MATERIALS (Specify):

_____☐ ANALYSES WITH SHORT-HOLDING TIMES (List Specific Analyses):

_____☐ OTHER (Specify):

_____**PART V: ANALYTICAL REPORT OPTIONS**

1.* DELIVER RESULTS BY: (Indicate preference **A hard copy report will be furnished in all cases**)

☐ ELECTRONIC DATA DELIVERABLE (EDD): _____☐ FAX TO: _____☐ MAIL TO: _____

2. EDD DATA TYPE:

☐ Excel☐ Access☐ Other: _____3. ADDITIONAL DATA REQUEST (These items are delivered by mail only): ☐ QC REPORT ☐ RAW DATA

4.* REQUEST SUBMITTED BY: _____

5. PRINT NAME: _____
(Authorizer)6. SIGNATURE: _____
(Note: Authorizer's Signature Required if Submitted by Hard

ANALYTICAL REQUEST TABLE (CONTINUED FROM PART II)

[illegible]

DIRECTORATE OF LABORATORY SCIENCES

CUSTOMER COMMENT/COMPLAINT FORM

Please provide comments (positive and negative) concerning DLS services on this form so the DLS can pursue the highest quality product possible. Your feedback enables us to identify strength and weakness in our current process and to appropriately direct resources for continuous quality improvement.

1. PERSON MAKING COMMENT

2. DATE

3. ORGANIZATION ADDRESS

4. PHONE #

Com:	DSN:	FAX:
-------------	-------------	-------------

5. E-Mail Address

6. COMMENT/COMPLAINT/PROBLEM (Who, What, When, Where, How):

7. SUGGESTED IMPROVEMENTS (if applicable):

8. Thank you for your comments/suggestions. Please send this form to Commander, USACHPPM, 5158 Blackhawk Road, ATTN: MCHB-TS-L, Quality Compliance Manager, APG, MD 21010-5403.

FOR DLS USE

Person Documenting Comment (If Other than Originator):		Date Documented:
CONTROL NUMBER ASSIGNED:		
Receiver:	Date:	PRIORITY ASSESSMENT ? Safety/Health (Immediate Action) ? Quality Improvement (High Priority) ? Process Improvement (Priority) ? Other (Routine)
Action Officer Assigned:	Date:	
Originator Notified By:	Date:	
DUE DATE:		
Date Completed:		
Date Filed:		
Date Copy to Action Officer:		

9. FINDINGS

10. IMMEDIATE CORRECTIVE ACTION AND MEASUREMENT

11. LONG TERM RESOLUTION

CONTROL NUMBER _____

12. ACTION OFFICER

Signature: _____ **Date:** _____

13. DLS/QCM REVIEW

14. APPROVAL

QCM Signature: _____ **Date:** _____

GLOSSARY

GLOSSARY

SECTION I – ABBREVIATIONS

A2LA	American Association for Laboratory Accreditation
Acode	Analytical Test Code
AIHA	American Industrial Hygiene Association
AOAC	American Organization of Analytical Chemists
APG	Aberdeen Proving Ground
BOD	Biological Oxygen Demand
CFR	Code of Federal Regulations
CLIP	Clinical Laboratory Improvement Program
COLA	Commission on Office Laboratory Accreditation
CONUS	Continental United States
DLS	Directorate of Laboratory Sciences
DOD	Department of Defense
DOT	Department of Transportation
DQO	Data Quality Objective
DSN	Defense Switched Network
ELLAP	Environmental Laboratory Lead Accreditation Program
FedEx	Federal Express
ID	Identification
IH	Industrial Hygiene
ISO	International Organization of Standardization
JONO	Job Order Number
LIMS	Laboratory Information Management System
LPC	Laboratory Project Coordinator

MBAS	Methylene Blue Active Substances
MSDS	Material Safety Data Sheets
NIOSH	National Institute for Occupational Safety and Health
NIST	National Institute of Standards and Technology
NVLAP	National Volunteer Laboratory Accreditation Program
OCONUS	Outside Continental United States
PAT	Proficiency Analytical Testing
PE	Performance Evaluation
QC	Quality Control
SOP	Standing Operating Procedure
SML	Sample Management Laboratory
TAT	Turnaround Time
TG	Technical Guide
UPS	United Parcel Service
USACHPPM	U.S. Army Center for Health Promotion and Preventive Medicine
USEPA	U.S. Environmental Protection Agency

SECTION II – TERMS

Acode

An analytical test code (Acode) (formerly called the DLS Test Code) is a unique number assigned by the DLS to each procedure.

analyte

The element or compound an analyst seeks to determine or measure; the compound of interest.

batch

A group of samples prepared at the same time in the same location using the same method.

blank

An artificial sample designed to monitor the introduction of artifacts or contamination into the analytical process. The blank is taken through the appropriate steps in the analytical process. Trip, field, equipment, and reagent blanks are examples of different kinds of blanks.

chain-of-custody (COC)

Legal documentation of the possession and handling of a sample from the time of collection until final disposition.

Code of Federal Regulations (CFR)

A codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government.

Data Quality Objective (DQO)

A statement defining a desired expectation for the data produced by the laboratory. USEPA developed DQOs as total quality management tools to facilitate the planning of environmental data collection activities.

duplicate samples

Samples collected simultaneously from the same source, under identical conditions, into separate containers. They are analyzed independently.

environmental sample

A representative sample of any material (aqueous, nonaqueous, or multimedia) collected from any source for which determination of composition or contamination is requested or required. Different classifications of environmental samples include drinking water (potable water), water/wastewater, sludges and sediments, soils, and solid wastes.

expenditure order (XO)

A USACHPPM accounting number that shows who is responsible for funding.

hazardous material

Any substance having the potential to cause a physical or health hazard. This is based on its potential for burning, exploding, or otherwise causing an injury to workers or the likelihood that exposure will result in acute or chronic health effects among employees.

holding time

The elapsed time from the date of sample collection until the initiation of the analytical procedure. Most holding times for different analytes are mandated by USEPA so the integrity of the analyte of interest is maintained.

matrix

The predominant material of which the sample to be analyzed is composed. Matrix is not synonymous with phase (liquid or solid).

Material Safety Data Sheet (MSDS)

A concise, descriptive chemical data sheet that follows the guidelines established by the Occupational Safety and Health Administration. It serves as the basis for written hazard communication programs.

preservation

Techniques which retard physical and/or chemical changes in a sample after it has been collected.

quality assurance

All planned and systematic actions necessary to ensure that the overall QC program is being effectively implemented and that laboratory data are of the requisite accuracy.

quality control (QC)

A planned system of activities that provides a level of quality that meets the needs of users. It is also the process through which a laboratory measures its performance, compares its performance with standards, and acts on those differences.

quality system

The organizational structure, responsibilities, procedures, activities, capabilities, and resources that together aim to ensure that laboratory services satisfy data requirements.

sample

A portion of material to be analyzed that is contained in single or multiple containers and identified by a unique sample number.

